

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/028,118	12/21/2001	Robert Harvey Kane	US010688	3122	
24737 7	590 03/29/2006		EXAM	EXAMINER	
	ELLECTUAL PROPE	CONSILVIO	CONSILVIO, MARK J		
P.O. BOX 300	1			· · · · · · · · · · · · · · · · · · ·	
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER	
			2872	·· <u>-</u>	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/028,118	KANE, ROBERT HARVEY				
	Office Action Summary	Examiner	Art Unit				
		Mark Consilvio	2872				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS OF THE MAILING THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communicatio D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 29 Ja	anuary 200 <u>6</u> .					
-		action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposit	ion of Claims						
4)⊠	Claim(s) 1-20 is/are pending in the application.						
•	4a) Of the above claim(s) <u>5-20</u> is/are withdrawn from consideration.						
5) 🗌	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1-4</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8) 🗌	Claim(s) are subject to restriction and/o	r election requirement.					
Applicat	ion Papers						
9)[The specification is objected to by the Examine	Г.					
•	The drawing(s) filed on is/are: a) acc		Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121((d).			
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority (under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:)-(d) or (f).				
	 Certified copies of the priority document Certified copies of the priority document 		ion No				
	2. Certified copies of the priority document3. Copies of the certified copies of the priority	· •	<u></u>				
	application from the International Bureau	•	ou in this Hational Stage				
* 5	See the attached detailed Office action for a list	· · · · · · · · · · · · · · · · · · ·	ed.				
		·					
Attachme-	tte)		·				
Attachmen 1) Notice	u(s) se of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application (PTO-152)				
	· , · · · · · · · · · · · · · · · · · ·	-, <u> </u>					

DETAILED ACTION

Status of Claims

Claims 1-20 are currently pending. Claims 5-20 were previously withdrawn. Claims 1-4 were previously rejected.

Response to Arguments

Applicant's arguments filed 1/29/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, not only can motivation be found in the knowledge generally available to one of ordinary skill in the art, but motivation can also be found in the Hansen reference in par.

42. Hansen teaches:

However, the wire grid polarizer itself presents various challenges. For example, the wire grid can be fragile or susceptible to damage in environments with high humidity, significant air pollution, or other conditions. Thus, it is desirable to protect the wire grid.

Contrary to applicant's argument that "Hansen does not teach or suggest sealing the wire grid to protect it from ambient environmental conditions," one of ordinary skill would clearly recognize from Hansen's teachings that specific sealing solutions would be desired.

The examiner notes that the subject matter of the art statement on page 4 of the Office Action dated 11/1/2005 (specifically, par. 3) has been taken to be admitted prior art since applicant has failed to seasonably traverse the assertion of Official Notice (See MPEP 2144.03).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US Patent Application Publication No. 2002/0015135) in view of Hirata et al. (US Patent No. 6,124,979).

With respect to claim 1, Hansen discloses a light polarizing device (200) comprising: a polarizing element (205) having an optically transparent substrate (202), an optically transparent cover sheet (203) sealed to a substrate (202), and an enclosure (207) including a non-reactive atmosphere (e.g. a vacuum) which can be understood to protect the optical element from environmental conditions (fig. 9 and pars. 125-134). While not expressly disclosed, it would be immediately understood by one of ordinary skill that the polarizing elements (205) are corrosion-sensitive, particularly to oxidation, when made from materials such as aluminum, silver, copper or gold (par. 131) and that the vacuum atmosphere would protect the optical elements. Hansen does not expressly disclose the cover sheet seal forms a sealed enclosure surrounding optical element. However, Hirata teaches a corrosion-sensitive polarizing element (8) sealed between

Art Unit: 2872

transparent sheets (81, 82) to protect the corrosion-sensitive polarizer from the ambient environmental conditions (fig. 54 and col. 37, lines 18-34). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Hansen and Hirata to further seal the polarizing element of Hansen in the manner taught by Hirata. One of ordinary skill in the art would have been motivated to do this to protect the sensitive polarizing element from environmental conditions such as a corrosive cooling fluid or the like.

With respect to claim 2, the combination of Hansen and Hirata discloses or suggests all the limitations of claim 1, as stated supra. Additionally, Hansen teaches that the polarizing element (205) includes a wire-grid polarizing element.

With respect to claim 3, the combination of Hansen and Hirata discloses or suggests a light polarizing device comprising: an optically transparent substrate, a corrosion-sensitive polarizing element on the substrate, an optically transparent cover sheet, sealant (83 in fig. 54 of Hirata) extending around the periphery of the device between the substrate and the cover sheet, and non-reactive atmosphere filling the interior space between the substrate and the cover sheet and protecting the corrosion-sensitive polarizing element as stated supra. The references are silent to a plurality of spacers distributed around the periphery of the device and supporting the cover sheet on the substrate above the element. However, the examiner takes Official Notice that spacers used to evenly space substrates are well known in the art. Further, one of ordinary skill would have understood that the spacers on each side would also protect the assembly from damage and allow the sealant to evenly seal the assembly without interfering with the optical transmission of the polarizer. Therefore, for these reasons, at the time the invention was made, it Art Unit: 2872

would have been obvious to a person of ordinary skill in the art to further provide such spacers around the periphery of the device and supporting the cover sheet on the substrate above the element to the combination stated supra.

With respect to claim 4, the combination of Hansen and Hirata discloses or suggests all the limitations of claim 3, as stated supra. Additionally, Hansen teaches that the polarizing element (205) includes a wire-grid polarizing element.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/028,118

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Consilvio whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Consilvio USPTO Patent Examiner

Jefferson, 3C21 AU-2872

Page 6

(571) 272-2453

PRIMARY EXAMPLE